control unit, with an activation control signal for actuation of the brake servo assistance unit being generated in the event measuring signals from the sensors exceed a reference value, wherein

two pressure sensors are provided and have different reference values assigned thereto, each of the pressure sensors being operatively associated with one of the brake circuits (11a; 11b), and the activation control signal is generated for temporary activation of the brake servo assistance unit for a limited time period in the event that a higher of the reference value from the first pressure sensor is exceeded and a lower of the reference values for the second pressure sensor has not yet been attained.



- 21. (New) Brake system according to claim 20, wherein at least one of absolute values and gradients are generated as the measuring signals.
- 22. (New) Brake system according to claim 20, wherein one of the reference values is generated by multiplying the first reference value by a reduction factor of less than one.
- 23. (New) Brake system according to claim 20, wherein the temporary activation is maintained for a limited, defined number of working cycles of the control unit and thereafter a deactivation control signal is generated for deactivation of the brake servo assistance unit.
- 24. (New) Brake system according to claim 20, wherein the temporary activation is maintained in the event that the measuring signal from a second of

the pressure sensors exceeds a reduced reference value during a defined number of working cycles.

- 25. (New) Brake system according to claim 20, wherein a deactivation control signal deactivating the brake servo assistance unit is generated in the event that the measuring signal from one of the sensors falls below a reference value.
- 26. (New) Brake system according to claim 20, wherein at least one travel sensor is provided for measuring the activity on the driver's part.
- 27. (New) Brake system according to claim 26, wherein an activation control signal is generated in the event that a pressure gradient of one pressure sensor and a speed value calculated from successive measuring signals of the travel sensor each exceed a reference value.
- 28. (New) Brake system according to claim 26, wherein an activation control signal is generated in the event that a pressure value of the pressure sensor and a speed value of the travel sensor each exceed a reference value.
- 29. (New) Brake system according to claim 26, wherein an activation control signal is generated in the event that a pressure gradient of the pressure sensor and a travel of the travel sensor each exceed a reference value.
- 30. (New) Brake system according to claims 26, wherein a deactivation control signal is generated in the event that the measuring signal from the travel sensor falls below a reference value.